

# CLIMATE NEWS

From Sheldon Whitehouse, Barbara Boxer, and Jeff Merkley

DPCC Meeting | May 23, 2013

## Climate-Driven Erosion Threatens Over 180 Native Alaskan Villages



According to the Government Accountability Office (GAO), over 180 native villages—or 86 percent of all native Alaskan communities—are affected by flooding and loss of land. Newtok, a 350-person community on Alaska's west coast, has lost an average of about 83 feet of land each year. The Ninglick River coils around Newtok on three sides before emptying into the Bering Sea, and it has quickly eroded the land because of rapid ice melt caused by climate change. According to a U.S. Army Corps of Engineers report, the entire village is likely to be underwater by 2017, as the land is too fragile or low-lying to support sea walls or other protective structures. The villagers will eventually have to leave their ancestral lands, becoming America's first climate change refugees. In 2007, Newtok voted to relocate to a new site nine miles away. However, because of the high cost of the move—expected to be as much as \$130 million—and Newtok's difficulties in navigating through state and federal agencies, construction has yet to begin on the first phase of basic infrastructure. Village leaders hope there will be progress this coming summer, when conditions become warm enough for construction crews to operate. (EESI/The Guardian)

## Common Plants, Animals Threatened by Climate Change

According to a new study, climate change could lead to the widespread loss of common plants and animals around the world. The researchers looked at 50,000 common species and found that more than half of the plants and approximately one third of the animals could lose about 50 percent of their geographic range by 2080 if the world continues its current course of rising greenhouse gas (GHG) emissions. The study predicts that plants, reptiles, and particularly amphibians will face the greatest risks from climate change. It found that sub-Saharan Africa, Central America, the Amazon region, and Australia will likely lose the greatest number of plant and animal species, while North Africa, Central Asia, and South America are projected to see "a major loss of plant species". Co-author Jeff Price says coffee, chocolate, teak, sugar maple, pineapple, and some of the major types of cotton all show large contractions in their ranges under the baseline climate change scenario. The study concluded that immediate steps to reduce emissions of heat-trapping GHGs could stave off 60 percent of species losses and give plants and animals another 40 years to adapt. (LA Times/nclimate1887)

## Insufficient Focus on Climate Change in Infrastructure Design

Billions of dollars are spent each year on transportation and water infrastructure projects without properly weighing the effects of climate change, the Government Accountability Office (GAO) said in a recent report. The lack of "systematic" climate planning on the federal, state, and local levels may leave infrastructure vulnerable to climate change, unnecessarily wasting taxpayer money and inviting unnecessary costs, said GAO. The report noted that most planning resources are consumed by more immediate concerns, and that decision-makers might lack data to help make more forward-looking choices. GAO also found that communities were more inclined to consider climate change after an extreme weather event compromised their infrastructure, or after being provided with guidance on how to incorporate climatic information into decision-making. While many agencies already consider climate change when performing environmental National Environmental Policy Act assessments, procedures for doing so are inconsistent across the federal government. (Greenwire)

## Warming Oceans Altering Fish Catches Across the Globe

Climate change is gradually altering fish catches around the world, according to a new study. "The composition of the [global] fish catch includes more and more fish from the warmer areas, and cold-water fish are getting more rare, because the temperatures are increasing," says co-author Daniel Pauly. As oceans warm, fish maintain their preferred water temperature by moving away from the equator and toward the poles. For example, people in Denmark are now encountering swordfish, which is normally found in the Mediterranean and off the coast of Africa. Data from global fish catches indicate that this is happening everywhere the ocean is warming—which is just about everywhere. The study documented species migration out of the tropics into cooler waters, but there are no fish to replace the ones that are leaving. "This is suddenly a wake-up call," says Mark Payne of Denmark's National Institute for Aquatic Resources. "It's a strong suggestion that climate change is here. It's real, and it's really starting to affect what we catch and, therefore, what we eat." (NPR/nature12156) 